

WHAT IS CLAIMED IS:

1. A substrate transport apparatus comprising:  
a substrate transport pod that can be sealed hermetically for holding substrates  
5 therein, which are taken out from a processing apparatus;  
at least one of a particle filter, a chemical filter, and a dehumidifying apparatus  
for removing, respectively, particulate substances, chemical substances, and moisture  
from a gas circulated inside the pod;  
a gas circulation apparatus for circulating a purified gas or purge means;  
10 a holding apparatus for holding the substrates;  
data storing means; and  
a power supply for driving the dehumidifying apparatus and/or the circulation  
apparatus and the data storing means.
- 15 2. A substrate transport apparatus according to claim 1, wherein said data  
storing means is provided for controlling an operation of the dehumidifying apparatus  
and/or the circulation apparatus.
- 20 3. An apparatus according to claim 1, further comprising:  
an identifier ID for distinguishing individual pods; and  
means for sending and receiving control information with outside data storing  
means.
- 25 4. A substrate transport apparatus according to claim 1, wherein the pod  
has means for receiving external signals, and controls internal environment in the pod  
according to the external signals.
- 30 5. A substrate transport apparatus according to claim 1, wherein an  
internal environment of the pod is controlled by sending and receiving information  
between the pod and a processing apparatus.
- 35 6. A substrate transport apparatus according to claim 1, wherein the pod is  
provided with processing history management information on substrates in said data  
storing means.
7. A substrate transport apparatus according to claim 6, wherein the  
processing history management information is transferred from one pod to other pod.

8. A substrate transport apparatus according to claim 6, wherein the processing history management information is communicated by way of a host computer network.

5 9. A substrate transport apparatus according to claim 6, wherein the processing history management information is transferred from one pod to other pod by a controller provided on a processing apparatus.

10 10. A substrate transport apparatus according to claim 6, wherein the processing history management information is transferred from a pod used in a preceding step to a pod to be used in a succeeding step.

15 11. A substrate transport apparatus according to claim 1, wherein an information on a pod to be washed is stored in the data storing means.

12. A substrate transport apparatus according to claim 11, wherein said information is sent to a pod washing machine so that the pod can be selected and subjected to washing.

20 13. A substrate transport apparatus according to claim 1, wherein a change of information stored in said data storing means is conducted by communication with outside data storing means by signal input/output portion.

25 14. A substrate transport apparatus according to claim 6, wherein a change of the processing history management information is conducted by signal input/output portion by sending and receiving information with outside data storing means.

30 15. A substrate transport apparatus according to claim 6, wherein a change of lot processing history management information is conducted by signal input/output portion by sending and receiving information with outside data storing means.

16. A substrate transport apparatus according to claim 1, wherein a washing interval information of the pod is stored in said data storing means.

35 17. A substrate transport apparatus according to claim 1, wherein a filter change interval information, or an information of a secondary battery is stored in said data storing means.

18. A substrate transport apparatus according to claim 17, wherein the filter change interval information of a pod is managed from a product of a processed gas volume and an operation time of the circulation apparatus or the dehumidifying apparatus.
- 5 19. A substrate transport apparatus according to claim 16, wherein the washing interval information is estimated from an operation time of the gas circulation apparatus.
- 10 20. A substrate transport apparatus according to claim 1, wherein residual power of a secondary battery provided for the pod is measured, and charged to a necessary level of power.
- 15 21. A substrate transport apparatus according to claim 6, wherein the processing management history information on individual pod is communicated by wire or radio transmission through a network.
- 20 22. A substrate transport apparatus according to claim 2, wherein an information on the pod to be washed is sent to a pod washing machine so that the pod can be selected and subjected to washing.
23. A substrate transport pod for containing, storing or transporting substrates, comprising:  
a pod main body and a door for hermetic sealing of the pod main body, which is  
25 formed primarily of a material having moisture absorption coefficient of not more than 0.1%, wherein the pod main body is in contact with the substrates directly or indirectly and has a conductive part so as to enable static charges to be drained from the pod main body; and  
a sensor provided for detecting whether the door is opened or closed;  
30 wherein a gas circulation apparatus and/or a dehumidifying apparatus is installed in said pod main body, and is controlled to operate by detecting that the door is closed or opened.
- 35 24. A substrate transport pod for containing, storing or transporting substrates, comprising:  
a pod main body and a door for hermetic sealing of the pod main body, which is formed primarily of a material having moisture absorption coefficient of not more than 0.1%, wherein the pod main body is in contact with the substrates directly or indirectly

and has a conductive part so as to enable static charges to be drained from the pod main body; and

a sensor provided for detecting presence of the substrates;

wherein a gas circulation apparatus and/or dehumidifying apparatus is controlled to

5 operate in accordance with detection signal of the sensor for detecting the presence of the substrates.